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ABSTRACT

This study was an attempt to provide information about the growing number of adult students who leave postsecondary education without a degree. Little has been done to improve the success rate of adult students, largely because so little information is available about why these students do not persist to graduation. The study looked at 295 students on two campuses, one accelerated (Regis University in Denver, Colorado) and one traditional (University of Missouri in Kansas City). In general, the study shows that adult students often leave college because they lack sufficient time or money to persist and succeed. To improve adults' persistence rates, the study suggests increased financial aid and more services geared to the needs of adults: more weekend courses; more and better advising; and improved student interaction with faculty and peers. Appendixes to this report are available at the Lumina Foundation Web site. (Contains 14 references.) (SLD)

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Early Exit: Understanding Adult Attrition in Accelerated and Traditional Postsecondary Programs

Synopsis: Higher Education Research Highlights

Raymond J. Wlodkowski, Jennifer Mauldin, and Scott Campbell

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July 2002

SYNOPSIS

Higher Education Research Highlights

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SUMMARY

Higher education officials and policy-makers are rightly concerned about the growing number of adult students who leave postsecondary education without earning a degree. Unfortunately, little has been done to improve the success rates of adult students, in part because so little reliable information exists about *why* these students fail to persist and graduate.

This paper — a follow-up to a larger study titled *Learning in the Fast Lane: Adult Learners' Persistence and Success in Accelerated College Programs* (Wlodkowski, Mauldin and Gahn, 2001) — is one attempt to provide such information. Though it involves students on only two campuses — one accelerated (Regis University in Denver) and one traditional (University of Missouri at Kansas City) — this study identifies several factors that influence adult students to leave college and points to some general recommendations for the institutions that serve such students.

In general, this study shows that adult students often leave college because they lack sufficient time or money to persist and succeed. To improve adults' persistence rates, the study's authors recommend increased financial aid and more services geared to adults' needs: more weekend courses, more and better advising, and improved student interaction with faculty and peers.

EARLY EXIT: UNDERSTANDING ADULT ATTRITION IN ACCELERATED AND TRADITIONAL POSTSECONDARY PROGRAMS

Background

Our understanding of adults leaving college is, at best, improvised — a combination of myth, common sense, recent experience and various research models. For adults, the term "dropout" is a misleading label. As the following research will show, adults do leave colleges, but their departures may be temporary, necessary for advancement in their job, or part of a process of personal development where another college or program is more desirable. Other reasons, such as insufficient income and lack of time due to family and work responsibilities, play a larger role in why adults leave higher education. Nonetheless, they do not plan to "drop out" permanently, but are instead drawn to the realities of their full lives, often meeting new challenges or making do with limited resources.

As educators, we need to be concerned about adults leaving college. As of 1999, the median family income of a

Recent estimates are that about 60 percent of adult students leave college before graduation.

high school graduate was $42,995 whereas the median family income of a college graduate was $76,059 (Mortenson, 2001). In 10 years, the cumulative difference is more than $300,000. Recent estimates are that about 60 percent of adult students leave college before graduation (Wlodkowski, Mauldin and Gahn, 2001). Clearly, these missed opportunities represent huge potential losses, both personal and social.

The research in this report extends the study reported in *Learning in the Fast Lane: Adult Learners' Persistence and Success in Accelerated College Programs* (available in the "Publications" section of the Lumina Foundation Web site, www.luminafoundation.org). The purpose of both studies was to identify factors that influence adult learners' persistence (continuing involvement in coursework or graduation) and success (grade point average).

The two universities participating in both studies are Regis University and the University of Missouri in Kansas City (UMKC). Regis University is a private Jesuit university with an enrollment of 13,500 students located in Denver, Colo. Its School for Professional Studies has 11,500 adult students enrolled in accelerated programs. UMKC is a public university with an enrollment of 11,000 students reflecting a large adult population enrolled primarily in traditional programs.

The important findings from *Learning in the Fast Lane* were:

- Adult learners benefit from having significant college experience before enrolling in four-year colleges. Having more transfer credits was associated with degree completion at both universities.
- Adult learners with higher grades were more likely to persist and succeed at both institutions.
- Women were twice as likely as men to graduate within six years at Regis University (accelerated format), but were two times more likely than men to drop out after one term at UMKC (traditional format).
- Financial aid enhances adult student persistence. At Regis University, adults who received financial aid were 2.9 times more likely than non-financial aid recipients to persist to the spring semester. This effect was even stronger at UMKC, where adults who received financial aid were more than four times more likely to persist.
- Social integration was associated with adult student persistence and success in the traditional program only.
- Several motivational variables were associated with higher grades in the traditional program: self-regulation, self-efficacy and instruction that supported students' intrinsic motivation.

Seeking to deepen our understanding of the reasons that adult students persist, we conducted a follow-up study on *Learning in the Fast Lane*, focusing on students who had been enrolled in Fall 1999 (when the first survey was administered) but did *not* re-enroll in Fall 2000.

First, using the "Exit Questionnaire," we surveyed 128 students. This questionnaire gathered information about two sets of variables — 1) those within students' domain of control, such as academic performance, employment, financial status and personal circumstances; and 2) those under institutional control, such as instruction, student services, career assistance and school environment. Findings from this study

suggest steps adult learners and colleges might take to increase persistence and success.

Next, we conducted a semi-standardized phone interview with 62 adults (32 from Regis University and 30 from UMKC) who had not re-enrolled in Fall 2000. These interviews focused on students' experiences prior to withdrawing from college. Information gleaned from these interviews provides a more comprehensive understanding of the factors associated with adult persistence and success.

Reasons for Leaving College: Survey Findings

In order to understand the reasons why adults leave college, an Exit Questionnaire was sent to all adult students at both universities who had enrolled in Fall 1999 but had not re-enrolled in Fall 2000. The adjusted total number of students was 295: 166 from Regis University and 129 from UMKC. Eighty-one students from Regis (49 percent) returned surveys, and 53 (41 percent) from UMKC returned them. Because of completion errors, three surveys from each school were discarded, resulting in sample sizes of 78 for Regis and 50 for UMKC, for a total of 128 students. (A copy of the Exit Questionnaire is available on the Web at: http://www.luminafoundation.org/synopsis/june02/exitinterview.pdf.)

Study Design

The Exit Questionnaire collected information about (a) demographic characteristics, (b) factors attributed to the student's domain of influence such as academic, employment, financial and personal circumstances, and (c) factors attributed to the college's domain of influence such as instruction, student services and school environment.

The survey provided data to address several research questions:

- Of the reasons adults give for leaving accelerated programs at Regis University and traditional programs at UMKC, which may be attributed to the student's domain of influence? Do these reasons relate to gender differences at either school?
- In the perception of adult students, what factors could be changed in accelerated programs at Regis University and in traditional programs at UMKC to influence these students to continue their enrollment? Do these perceived changes relate to gender differences at either school?
- Do the reasons for leaving accelerated programs at Regis University and traditional programs at UMKC differ for adults who have more than 35 credits to complete compared to adults who have 35 or fewer credits to complete?

By focusing on specific reasons that adults give for leaving college, we better understand what might be done to retain students and can better inform policy decisions and intervention strategies.

Findings from this study suggest steps adult learners and colleges might take to increase persistence and success.

Population Comparisons

As detailed in Exhibit 1, survey respondents at both Regis and UMKC are predominantly white, female and married. They differ, however, in employment status and income levels; far more Regis respondents are employed full time and earning at least $26,000 per year.

Analysis

Exhibit 2 shows the seven most frequently cited reasons for leaving college that are within students' domain of influence. Although the specific percentages differ, the reasons are the same for students at both universities. These reasons are also what you would expect from responsible adults: conflict with job, home responsibilities, and too little time to study. All are reasons associated with the demands of family and work.

For students at both colleges, *not enough money to go to school* was cited as a significant reason for leaving, as indicated by 50 percent of the students at Regis and 47 percent at UMKC. Also, nearly a third of students at both schools listed *could not find sufficient financial aid* as a reason for their departure. These results, which suggest that adults perceive the need for financial aid, also reinforce the finding in *Learning in the Fast Lane* that tuition aid is significantly related to persistence and grades at both universities.

We checked for differences at each college between men and women and between students closer to graduation and those who are farther away (i.e., needing more than 35 credits). The only statistically significant differences were:

- At Regis University, child-related problems were cited more frequently by women than by men (39 percent vs. 13 percent).
- At UMKC, more women than men said that insufficient financial aid was a problem (32 percent vs. 18 percent).

Exhibit 1
Profile of Survey Respondents

	Regis	UMKC
Number of completed surveys	78	50
Female	64%	65%
White	69%	69%
Average age	35.2	34.1
Married	59%	54%
Children at home	44%	50%
Single parents	11%	16%
Employed full time	91%	43%
Income less than $26,000/year	16%	49%

Tuition aid is significantly related to persistence and grades at both universities.

At UMKC, 72 percent stated that they intended to return to school at UMKC; 75 percent of respondents at Regis reported they intended to return to Regis. These findings are typical of exit survey results, though our previous studies indicate that adult students who leave school rarely return to the same college.

Influences to Continue Enrollment

In terms of what their college could do to influence them to continue their enrollment, the findings are similar for Regis University and UMKC, as seen in Exhibit 3.

Exhibit 2
Reasons for Leaving College
Top reasons within students' domain of influence

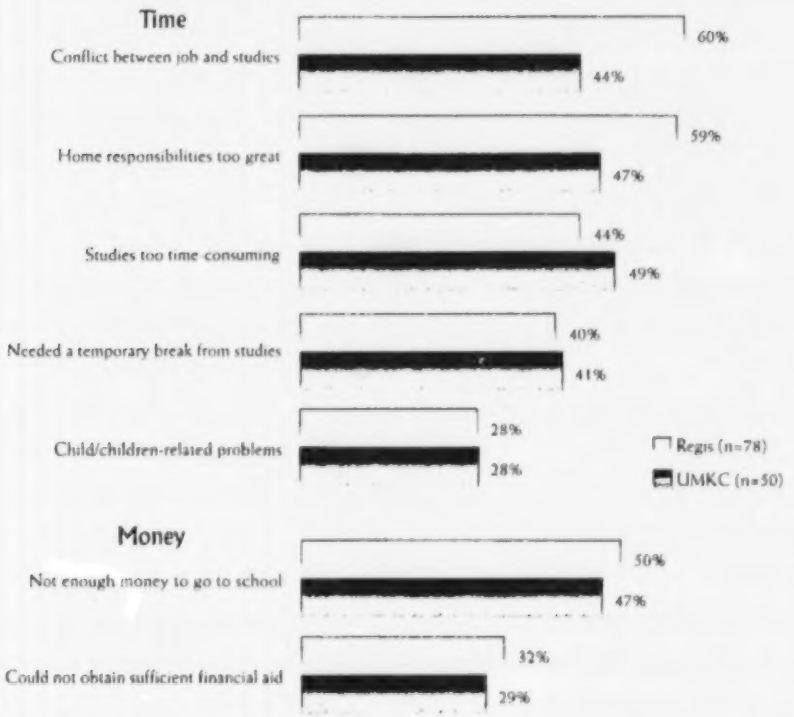
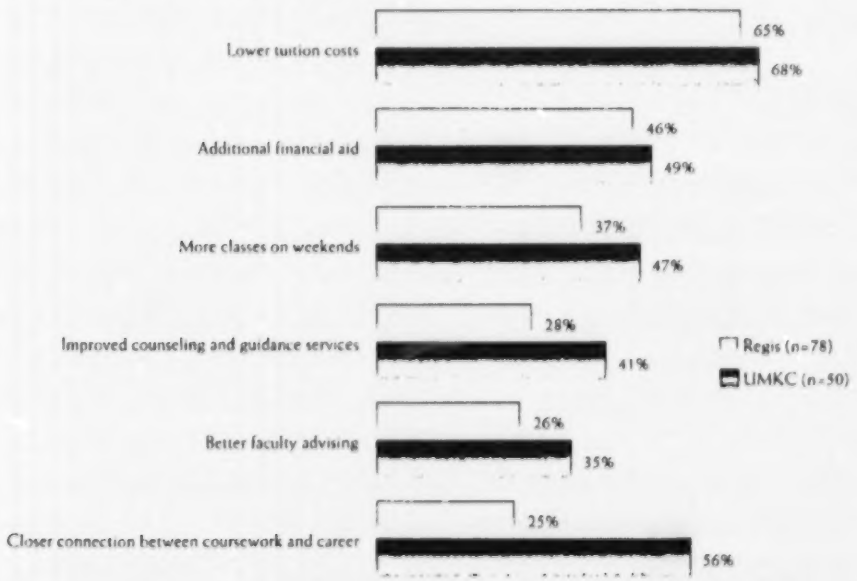


Exhibit 3
What Colleges Could Do
Influences on students to continue their enrollment



Previous studies indicate that adult students who leave school rarely return to the same college.

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Not surprisingly, *lowering tuition cost* was identified as a change that would influence the greatest proportion of adult students to continue their enrollment at both colleges. *Additional financial aid* is also a popular recommendation, ranking second at Regis and third at UMKC.

Probably closely related to *conflict with job* and *home responsibilities* is a desire for *more classes on weekends*. Finally, improved *guidance* and *better faculty advising* were seen by at least 25 percent of the respondents at both schools as a positive influence for continuing enrollment.

At UMKC, we found no gender differences on this series of questions. At Regis, however, more women than men called for *lower tuition costs* (81 percent vs. 41 percent) and *additional financial aid* (60 percent vs. 27 percent). Also, more women than men at Regis suggested *more classes on weekends* as a factor that might have kept them in college.

Again, there were no significant differences at either school between those who needed 35 or fewer hours to graduate and those who needed 36 or more hours.

The literature on best practices for adult learners emphasizes the importance of student support services in aiding persistence.

Insights about Leaving College: Interview Findings

This part of the study contributes to a more qualitative understanding of why adults leave college. We conducted a phone interview that focused on their experiences prior to withdrawing from college.

Study Design

We interviewed 32 students from Regis University and 30 students from UMKC. These individuals had enrolled in Fall 1999 but had not enrolled in Fall 2000. Fifteen of the students at each school were students who had not returned their self-report exit surveys. We stratified our sample in this manner to broaden our sample population and to collect data from students who may not have been inclined to provide information on a written survey.

The interviewer was a doctoral intern at the Center for the Study of Accelerated Learning. He took care to limit the interview to approximately 10 minutes. He asked seven questions in the same sequence to ensure that the same topics were covered for each respondent. Interviews for the students who had completed the exit survey were conducted with the student's completed survey in hand. The other interviews were conducted without this reference.

We based the semi-standardized interview, in part, on those variables that have been consistently found within college programs to be significantly associated with adult student persistence — interaction and connection with students and faculty (New England Adult Research Network, 1999; Tinto, 1998). We also included questions about advising because the literature on best practices for adult learners emphasizes the importance of student support services in aiding persistence (Council for Adult and Experiential Learning, 2000).

We analyzed findings separately for each of four student groups: two groups from each institution, based on whether they had returned the exit survey. Sample sizes are shown in Exhibit 4.

Based on our experience with previous interviews and because we used the exit survey as a guide for the phone interviews, we created a coding scheme that integrated several elements from the exit survey into a thematic category. For example, we created the thematic category of *not enough money* to integrate both *not enough money to go to school* and *could not obtain sufficient financial aid.*

Exhibit 4
Interview Sample Sizes

Returned Exit Survey?	*Regis*	*UMKC*	*Total*
Yes	17	15	32
No	15	15	30
Total	32	30	62

Also, we noted from previous interviews that students often combine reasons for leaving college into a single thematic category such as "not enough time." For example, adults see *family and work responsibilities* as a totality that denies them enough time to do well in school; they do not see *family responsibilities* as one barrier and *work responsibilities* as a separate, independent barrier. Thus, we used *family and work responsibilities* as a single thematic category.

Due to their absence from the exit survey and because of their importance in previous interviews, we added the thematic categories of *better interaction with students* as an influence to continue enrollment and *accelerated learning format* as a reason to leave.

Findings

1. **Time:** Lack of time was the dominant theme for leaving both colleges. These adult students repeatedly made reference to competing priorities, being overwhelmed, and just not having enough time to meet the demands of schoolwork. Extreme circumstances were not uncommon. One student reported, "I had to stop going to school. My husband recently died, and I just had a baby six weeks ago." Another, "I felt like I was going in four directions at the same time and just finding enough time to drive to school was becoming a problem."

While Regis students most often cited *not enough time due to conflict with family and work responsibilities*, UMKC students emphasized that *inflexible scheduling of courses* posed an intolerable burden on their personal and professional lives. A former student said, "UMKC has a very limited schedule of classes and my schedule just doesn't work with it." Another student stated, "I've waited two semesters for this class, and it hasn't come along when I can take it."

2. **Money:** In both schools, a higher proportion of adults who did not return surveys identified lack of money as a reason to leave. This finding may occur because, for many people, the lack of sufficient funds may be a source of embarrassment, something they found difficult to reveal. Nonetheless, lack of money is clearly a problem. As one student put it: "I've got to care for my mom, and the money only goes so far. When it came to tuition, I just ran out." A few students

Adult students repeatedly made reference to competing priorities, being over-whelmed, and just not having enough time.

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Students at both colleges reported that better interaction with other students would induce them to continue their enrollment.

commented about their dependency on tuition reimbursement, " I changed employers, and this one doesn't pay for tuition. I didn't have the money. I just had to stop." Another student commented that there didn't seem to be "many scholarships or financial aid for adults at Regis."

3. **Quality of advising**: A desire for better advising was more of an issue at Regis than at UMKC. Regis students felt let down or misinformed by their advisers, with more than half of those interviewed sharing frustrations about advising: "I didn't know I had one ... She was never in" ... "My adviser never followed up" ... "I was passed around twice and never met the second adviser." UMKC students had far fewer complaints and were more satisfied with the services, but still wanted more contact with their advisers.

4. **Quality of teaching**: At both colleges some students believed better teaching would have influenced them to continue with school. However, most students at both schools were enthusiastic about their learning environment and were generally positive about their interaction with faculty.

5. **Peer interaction**: Some students at both colleges reported that better interaction with other students would induce them to continue their enrollment.

Regis students often indicated they enjoyed interacting with their peers. Their remarks included phrases such as "easy to relate to" ... "supportive" ... "knowledgeable"... "pleasant" ... and "dedicated." One student said, "I felt comfortable because everyone else was working full time as well." Another commented, "They know the system and help steer each other to good instructors." Among those who needed better interaction with students was a distance education student who stated, "There was no community to speak of. I need that."

At UMKC, where the age of students varies more, being with younger students seemed an advantage to some adults: "I loved it. I felt like I was there with my children." Yet, there were also a few adults who weren't enthralled with younger students. One remarked, "I was a bit uncomfortable. I was much older than most of the students." Another said, "As an older student, it was hard to concentrate sometimes with the younger students talking like high school." Among other students seeking better interaction was one student who said, "I felt out of place with no one to relate to." Another was very specific when she remarked, "I need to be with students who are more motivated to learn."

RECOMMENDATIONS

Based on student feedback reported here, combined with our earlier research reported in *Learning in the Fast Lane*, we submit the following recommendations for improving success rates of adult learners. They are presented in no particular order. These recommendations, though specifically addressed to Regis University and UMKC, may be informative to other colleges that serve adult learners.

1. **Recommendation**: Increase financial aid for adult students, particularly women, at both schools. Sources beyond federal aid (such as foundation support and tuition discounts) should be considered.

   Rationale: At both colleges, *not enough money to go to school* is a significant reason for leaving, as indicated by nearly half the students surveyed. Also, 30 percent of students at both schools cited *could not find sufficient financial aid* as a reason for their departure. These results, which suggest that adults perceive the need for financial aid, also reinforce the finding in *Learning in the Fast Lane* that tuition aid is significantly related to persistence and grades at both universities. At both institutions, lack of money is a critical issue for a higher percentage of women than men.

2. **Recommendation**: For accelerated programs, consider establishing a peer-support program to improve persistence. At both schools, deepen interaction with faculty.

   Rationale: Better social integration with peers correlates with persistence at both schools. Research findings from other studies confirm that positive involvement with peers and faculty encourages adult learners to persist.

3. **Recommendation**: At both colleges, create or expand weekend course schedules.

   Rationale: Conflict with job and family responsibilities is cited as a major reason for leaving at both schools. Weekend course schedules allow for more flexibility in finding resources to remain in school. Also, an accelerated program with its intense schedule makes weekend courses more adaptable to family and job responsibilities that women may feel more pressured to accommodate.

4. **Recommendation**: Make advising a more understandable and dependable process for adults at both schools, especially in the first year of enrollment.

   Rationale: At least one-fourth of the students at both schools see improved guidance and better advising as a positive influence for remaining in school.

At both institutions, lack of money is a critical issue for a higher percentage of women than men.

Issues for Further Research

We need to extend studies of this nature to a wider sample of colleges and regions so that we may identify and build the structures within colleges that increase adults' access and their chances for degree completion.

We will continue these efforts November 6-9, 2002, when we convene the directors of accelerated college programs at the International Council for Adult and Experiential Learning Conference in Washington, D.C. Our purpose for this meeting is to work with the directors to build a research agenda that can help improve adult learning and increase success in accelerated programs. (For more information about the conference, visit the Center for the Study of Accelerated Learning on the Web at: http://academic.regis.edu/jgonzale/Center web pages/default.htm.)

We also are conducting validation studies to refine the Adult Learning Survey (ALS), which was used to collect data for *Learning in the Fast Lane*. This evaluation of the ALS will prepare it for widespread use as a tool for assessing adult student populations and providing information for colleges to better serve adult learners.

References

Babbie, E. (1998). *The Practice of Social Research*. Belmont, Calif.: Wadsworth.

Council for Adult and Experiential Learning (2000). *Serving Adult Learners in Higher Education: Principles of Effectiveness*. (Executive Summary), Chicago: Council for Adult and Experiential Learning.

Cross, K.P. (1981). *Adults as Learners: Increasing Participation and Facilitating Learning*. San Francisco: Jossey-Bass.

Hochschild, J.A. (1989). *The Second Shift: Working Parents and the Revolution at Home*. New York: Viking.

Mission Formation and Diversity Project (1999). *The Mission, Formation and Diversity Survey Report: Adult Degree Programs at Faith-Based Colleges*. Princeton, N.J.: The Center for the Study of Religion at Princeton University.

Mortenson, T.G. "Trends and patterns in undergraduate enrollment by age." Presentation at the International Conference of the Council for Adult and Experiential Learning, Orlando, Fla., November 9, 2001.

New England Adult Research Network (1999). *Factors Influencing Adult Student Persistence in Undergraduate Degree Programs*. Amherst, Mass.: Victoria Dowling, University of Massachusetts.

Pintrich, P.R. (1999). "The Role of Motivation in Promoting and Sustaining Self-regulated Learning." *International Journal of Educational Research*, 31, 459-470.

Schunk, D.H. and Zimmerman, B.J., eds. (1994). *Self-regulation of Learning and Performance: Issues and Educational Applications*. Hillsdale, N.J.: Erlbaum.

Tinto, V. (1998). "Colleges as Communities: Taking Research on Student Persis-

tence Seriously." *The Review of Higher Education, 21*, 167-177.

Trawick, L. and Corno, L. (1995). "Expanding the Volitional Resources of Urban Community College Students." In *Understanding Self-regulated Learning*, P.R. Printrich, ed. New Directions for Teaching and Learning, No. 63. San Francisco: Jossey-Bass.

Van der Kamp, M. (1996). "Participation: Antecedent Factors." In *International Encyclopedia of Adult Education and Training*, (second edition), A.C. Tuijnman, ed. Tarrytown, N.Y.: Pergamon.

Wlodkowski, R.J., Mauldin, J.E. and Gahn, S.W. (2001). *Learning in the Fast Lane: Adult Learners' Persistence and Success in Accelerated College Programs*, Indianapolis: Lumina Foundation for Education. [Note: Parts of this paper also draw on material from sources originally cited in the References section of *Learning in the Fast Lane*. That publication, which includes a copy of the *Adult Learning Survey* listed directly below, is available in Personal Document Format (PDF) on the Web at the following address: www.luminafoundation.org/Publications/New Agenda Series/FastLane.pdf.]

Wlodkowski, R.J., Mauldin, J.E. and Gahn, S.W. (1999). *The Adult Learning Survey*. Indianapolis: Lumina Foundation for Education.

The appendices to this report — including the Exit Questionnaire and the list of Phone Interview Questions — are available on the Lumina Foundation Web site at these addresses:

- www.luminafoundation.org/Publications/pdfs/july02exitinterview.pdf
- www.luminafoundation.org/Publications/pdfs/july02phoneinterview.pdf

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The Center for the Study of Accelerated Learning, located in the School for Professional Studies at Regis University, is a research institute for the assessment of the quality and applicability of intensive learning formats in higher education. The center conducts primary research on adult learning to evaluate teaching strategies, document outcomes and provide ongoing education to support the effectiveness of accelerated programs.

SYNOPSIS

The primary mission of Lumina Foundation for Education is to expand access to education by supporting research, innovative programs and communication initiatives. The Foundation focuses its work in three areas related to postsecondary education: financial access, student retention and attainment, and nontraditional learners and learning.

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